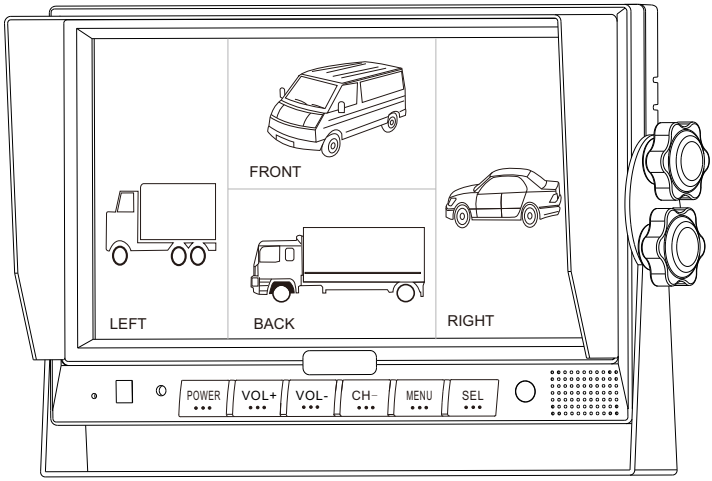
Operating Instructions



7" COLOR LCD QUAD MONITOR

Please read this manual thoroughly before operating the unit,
and keep it for future reference.

V1.8

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1. Precautions

● Storage and Keeping

1. Do not expose the monitor to excessive heat or cold. The storage temperature of this device is -30~+80℃, and the operating temperature is -20~+70 ℃. The humidity is Rh90%.
2. Never use this device where it is damp, such as close to wash basin, kitchen, swimming pool and the like.
3. Never use this device in a dusty or smoky condition.
4. Avoid dropping or striking this device.
5. Avoid using this device in enclosed spaces, areas with excessive vibration or subject to severe impacts.
6. Never puncture, scratch or use abrasive cleaning materials on this device.
7. Do not place cables where they may be pinched or stepped on.
8. Leave at least a 2" space between the monitor and walls, cabinets or other objects to allow adequate air circulation around the unit.

● Operating Precautions

1. The device may be powered by a 10~32 volt automotive battery.
2. Make sure all cables are connected properly. Observe polarity. Improper cable connections may damage the monitor. Remove the power cable connections when you do not intend to use the unit.
3. Operate the unit according to the instruction.

⚠ Warning!

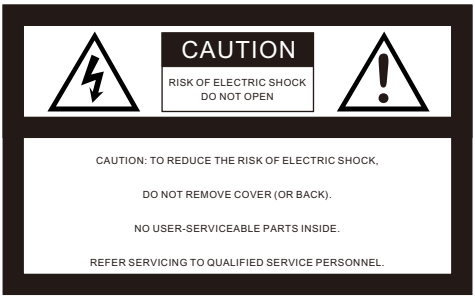
1. High voltage is inside. The enclosure shall not be opened unless by professionals.
2. Do not watch the video while driving unless you are backing up the vehicle.

⚠ Special Notice

Occasionally, a few highlights or dark spots may occur on the LCD screen. This is a very common phenomenon in active matrix display technology, and doesn't necessarily indicate any defects or faults. Never try to repair this device by yourself. In case of any problems, please turn off the display at once and notify our company or authorized dealer. The monitor is a complex device. Any disassembly or modification may lead to damage and void the warrantee.

Maintenance

1. Remove all the cable connections from the monitor before cleaning the unit.
2. Use a mild household detergent and clean the unit with a slightly damp,soft cloth.
   Never use strong solvents such as thinner or benzine, as they might damage the finish of the device.



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

This symbol is intended to alert the user not to waste electrical and electronic equipment.

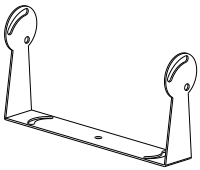
CAUTION

You are cautioned that any changes or modifications not expressly approved in this manual could void your warrantee and neccessitate expensive repairs.

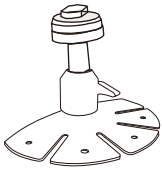
Declaration of conformity

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference.
(2) This device must accept any interference received, including interference that may cause undesired operation.

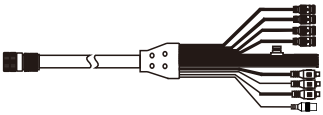
2. Products



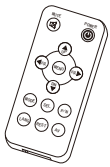
U-Support Bracket



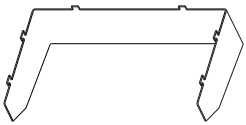
Center Mount Bracket



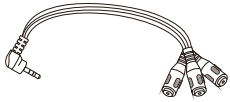
AV and Power Supply
Conversion Cable



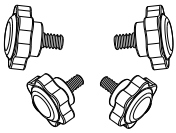
IR Remote Control



Sun Shield



Front Panel AV Input Adapter



Angle Adjustment Screws

⚠ Special Notice

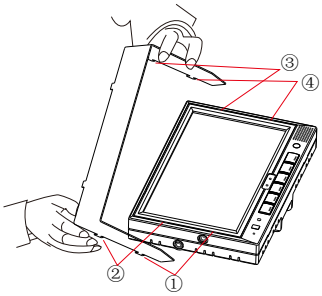
Accessories may be different for different applications.

3. Monitor installation

3.1 Installation

3.1.1 Installation of sun shield

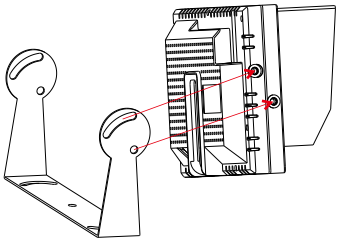
As illustrated, insert the hooks ①、②、③、④ of the sun shield into the monitor.



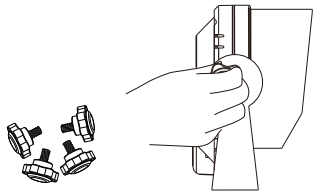
①

3.1.2 Installation of U-support bracket

①As illustrated in the picture, align the bracket with monitor.
②Adjust the bracket to proper angle and tighten screws.



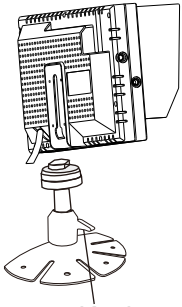
②



③

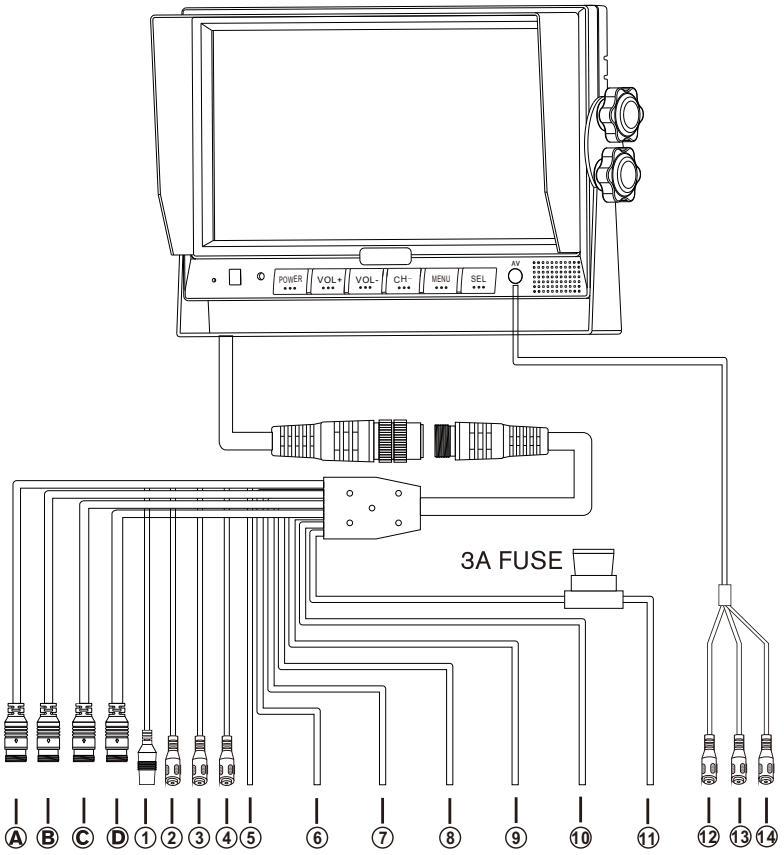
3.1.3 Installation of center mount bracket

①Loosen the knob on top of the center mounting bracket in picture ④.
②Adjust monitor level by sliding the support to the desired height.
③Adjust the angle of the monitor and tighten the knob on the center mount bracket.



④

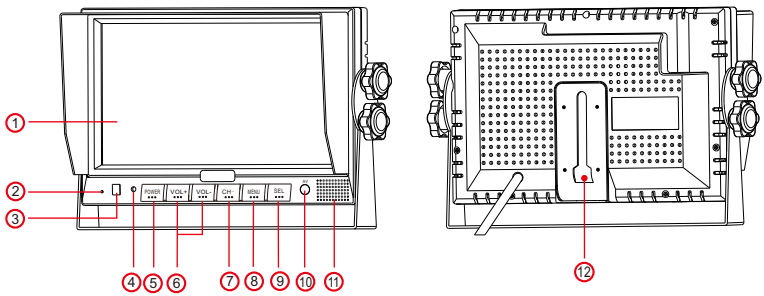
4. Connections



Ⓐ Camera 4 Ⓑ Camera 3 Ⓒ Camera 2 Ⓓ Camera 1

① AUX audio input
② Green: Rec. V. output
③ Yellow : Live V. output
④ White: Audio output
⑤ White: Trigger 1
⑥ Blue: Trigger 2
⑦ Green: Trigger 3
⑧ Brown: Trigger 4
⑨ Yellow: Split trigger
⑩ Black : Ground
⑪ Red: Power
⑫ DVD video input (yellow RCA)
⑬ DVD audio input (white RCA)
⑭ Null (red RCA)

5. Parts Identification



① Color LCD screen

② LDR

③ Remote signal receiver window

④ Power indicator
The green light/red light is on when monitor is powered/standby; The light is off when the power is off.

⑤ Power off/on button

⑥ To increase / decrease the volume and switch between values of each sub-menu

⑦ Menu selection and display mode (single, dual, triple, quad-view, PIP image) selection

⑧ Menu control button

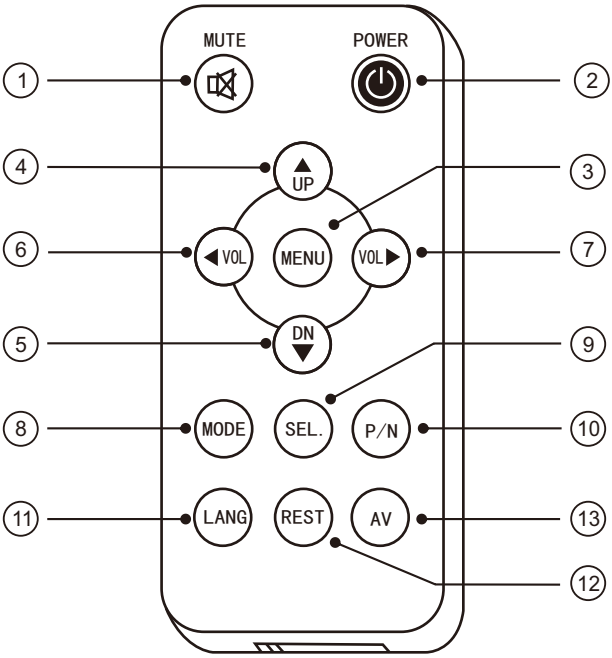
⑨ Jump key selector. Fast jump to the display mode specified by SYSTEM SETUP - JUMP KEY

⑩ DVD A/V input

⑪ Loudspeaker

⑫ Installation port for center mount bracket

6. Remote Operations



⚠WARNING

1. Please align the remote control with the remote signal receiver window to operate.
2. Never disassemble the remote control or allow it to drop, or get wet.

① MUTE
To mute / unmute the volume

② POWER
Power off/on button

③ MENU
Menu control button

④ UP
Menu selection up

⑤ DN
Menu selection and display mode (single, dual, triple, quad-view, PIP image) selection

⑥ VOL−
To decrease the volume and switch between values of each sub-menu

⑦ VOL+
To increase the volume and switch between values of each sub-menu

⑧ MODE
Menu selection and display mode (single, dual, triple, quad-view, PIP image) selection

⑨ SEL.
Jump key selector. Fast jump to the display mode specified by SYSTEM SETUP - JUMP KEY

⑩ P/N
PAL/NTSC TV system selector

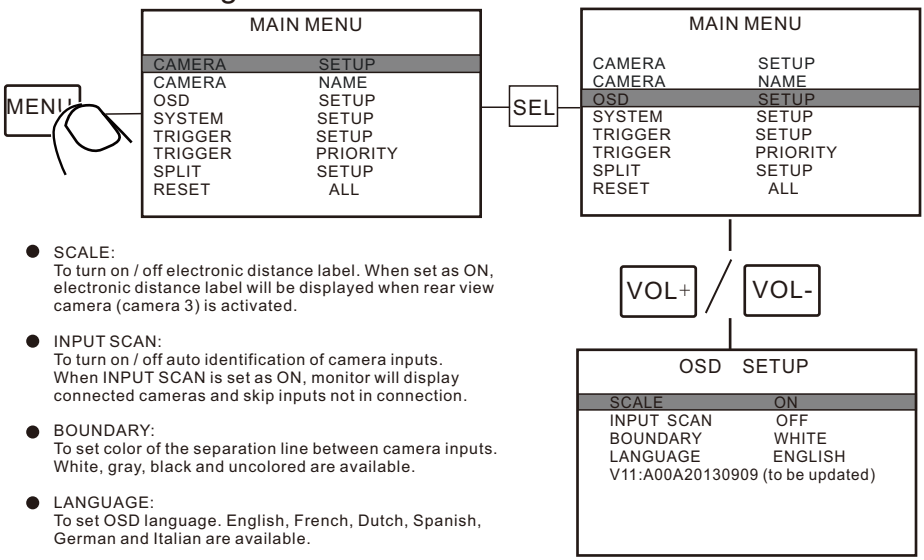
⑪ LANG
Language selection

⑫ REST
To restore factory settings

⑬ AV
To go to / leave DVD channel

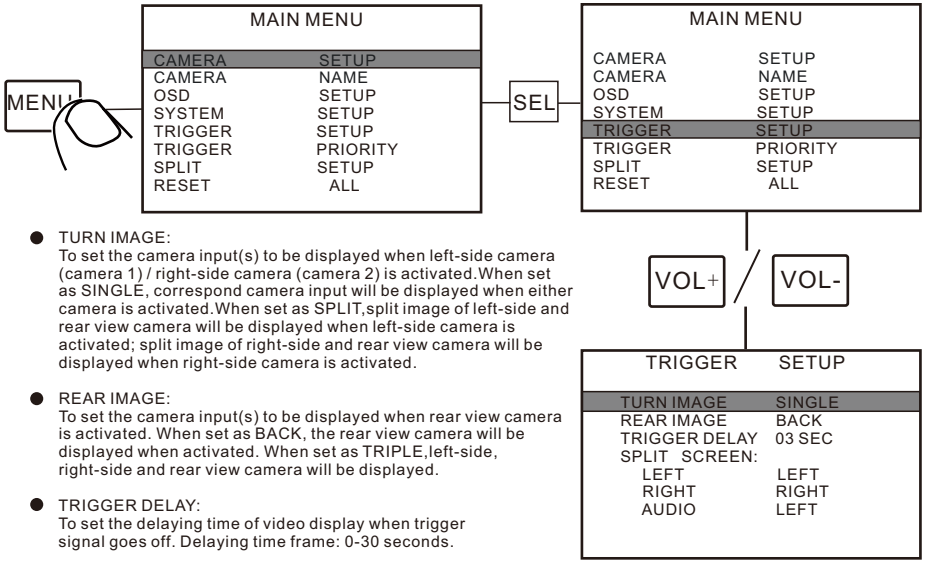
7. Menu Operations

7.1 OSD Setting



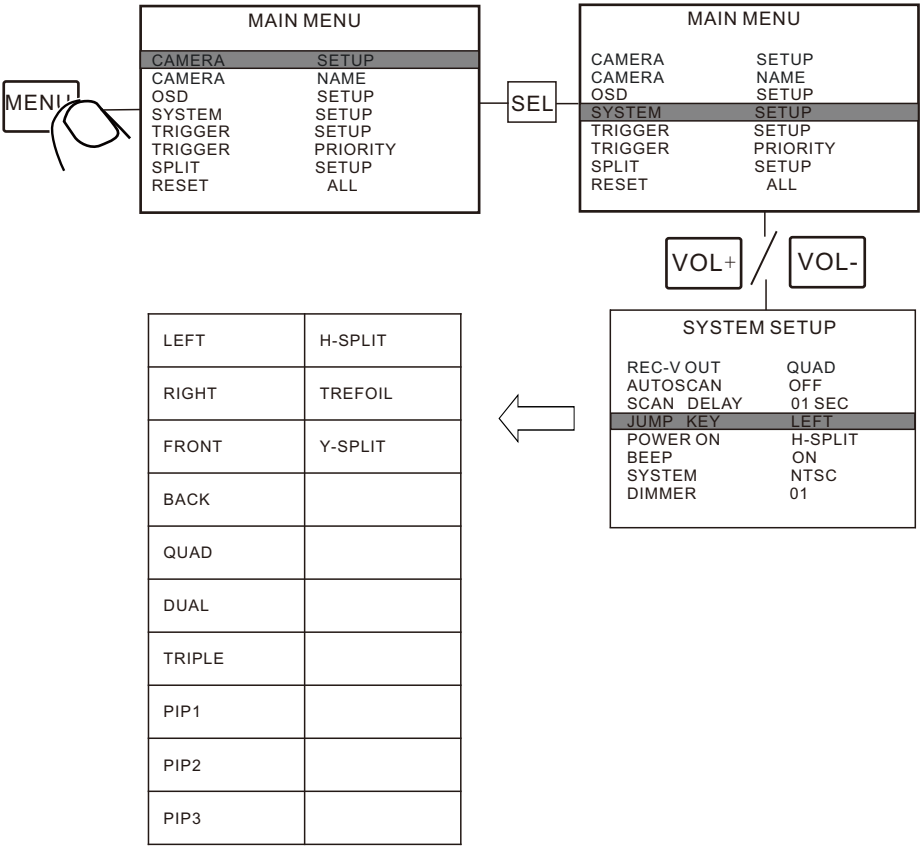
- SCALE:
  To turn on / off electronic distance label. When set as ON, electronic distance label will be displayed when rear view camera (camera 3) is activated.
- INPUT SCAN:
  To turn on / off auto identification of camera inputs. When INPUT SCAN is set as ON, monitor will display connected cameras and skip inputs not in connection.
- BOUNDARY:
  To set color of the separation line between camera inputs. White, gray, black and uncolored are available.
- LANGUAGE:
  To set OSD language. English, French, Dutch, Spanish, German and Italian are available.
- SOFTWARE VERSION:
  To be updated at all times.

7.2 Trigger Setting



- TURN IMAGE:
  To set the camera input(s) to be displayed when left-side camera (camera 1) / right-side camera (camera 2) is activated.When set as SINGLE, correspond camera input will be displayed when either camera is activated.When set as SPLIT,split image of left-side and rear view camera will be displayed when left-side camera is activated; split image of right-side and rear view camera will be displayed when right-side camera is activated.
- REAR IMAGE:
  To set the camera input(s) to be displayed when rear view camera is activated. When set as BACK, the rear view camera will be displayed when activated. When set as TRIPLE,left-side, right-side and rear view camera will be displayed.
- TRIGGER DELAY:
  To set the delaying time of video display when trigger signal goes off. Delaying time frame: 0-30 seconds.
- SPLIT SCREEN:
  To set the camera input(s) to be displayed when “split”trigger wire is activated.
  LEFT / RIGHT is to set the camera input to be displayed on the left / right side of monitor screen.
  AUDIO is to set the audio output from any of the four cameras.

7.3 Jump Key Setting



- REC-V OUT:
  To set the camera input(s) to be recorded when connected to DVR via the green RCA wire.
  Left-side, right-side, front view, rear view camera and quad view image can be selected.
- AUTOSCAN:
  To set the auto scanning function. When AUTOSCAN is set as ON,
  monitor will automatically switch between connected camera inputs and quad image.
- SCAN DELAY:
  To set the switching time of AUTOSCAN. Switching time frame: 0-60 seconds.
- JUMP KEY:
  To set the shortcut display mode from the 13 modes to the left.It can be activated by jump key selector.
- P-ON MODE:
  To set the default display model from the 13 modes to the left or STANDBY mode.
- BEEP:
  To turn on / off the warning tone. Default setting is ON and there will be a beeping sound when menu is being operated.
- SYSTEM:
  To set TV system: PAL / NTSC.
- DIMMER:
  To set backlighting brightness level of screen. Five levels and AUTO option are available; the higher the level, the brighter. When set as AUTO, backlighting automatically adjusts in accordance with the outer brightness.

8. Specifications

Dimension	7"
TV System	NTSC/PAL
Resolution	800 (W) × 3 (RGB) × 480 (H)
Brightness	400cd/㎡
Contrast	500:1
Viewing Angle	U: 50, D: 70, L: 70, R: 70
Aspect Ratio	16:9
Pixel Pitch (mm)	0.0642 (W) x 0.1790 (H)
Operating Temperature	-20 ℃ ~ +70 ℃
Storage Temperature	-30 ℃ ~ +80 ℃
Power Consumption	Max. 25W
Power Output to Camera	Max. 4 × 300mA, 12V
Power Supply	10V~32V
Video Input	4 video inputs for camera - peak value: 1Vp-p, impedance: 75 ohm 1 DVD input - peak value: 1Vp-p, impedance: 75 ohm
Audio Input	4 audio inputs for camera - peak value: 1Vp-p, impedance: 4.7K ohm 1 AUX audio input - peak value: 1Vp-p, impedance: 4.7K ohm 1 DVD audio input - peak value: 1Vp-p, impedance: 4.7K ohm
Video Ouput	1 REC Video output - peak value: 1Vp-p, impedance: 75 ohm 1 LIVE Video output - peak value: 1Vp-p, impedance: 75 ohm
Audio Output	1 REC audio output - peak value: 1Vp-p, impedance: 4.7K ohm

9. Troubleshooting

The symptoms described below do not necessarily mean a failure within the display. Please check the following items before you initiate request for repair.

Symptom	Possible Causes/Solutions
No picture, no sound	Improper connection of automobile adapter. Use of un-authorized power supply. Power switch is on OFF position.
No picture	Check whether AV cable is properly connected.
No sound	Check whether audio wire is properly connected or the sound volume is turned off or set too low.
Dark picture	Check whether brightness and contrast are adjusted correctly; Check whether the environmental temperature is too low.
No color	Adjust the color settings.
Upside down or lateral inverted picture	Use the remote control horizontal /vertical selection switch to set proper orientation
No reverse gear activated screen(i.e. Picture)	The black wire of the monitor AV cable to the reversing light may be loose. The red wire from the monitor may be loose.

WARNING

Monitor systems are strictly intended to be installed as a supplement and not intended for use as substitutes for rear-view mirror devices, or for any other standard motor vehicle equipment required to be installed on vehicles by law. Our products are no substitute for proper defensive driving techniques, observance of traffic laws and motor vehicle safety regulations.

Serial No:	Stock code: